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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,612	07/10/2003	Matthew Stephen Whalen	APSCI-001A	2743
7663 7590 07/25/2007 STETINA BRUNDA GARRED & BRUCKER 75 ENTERPRISE, SUITE 250 ALISO VIEJO, CA 92656			EXAMINER SELBY, GEVELL V	
			ART UNIT 2622	PAPER NUMBER
			MAIL DATE 07/25/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/616,612	Applicant(s) WHALEN, MATTHEW STEPHEN	
	Examiner Gevell Selby	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wess et al., US 2004/0201745, in view of Juen, US 6,727,943.**

In regard to claims 1 and 21, Wess et al., US 2004/0201745, disclose a digital imaging system or a modular imaging system comprising:

a housing (see figure 1, element 16) having a lens (see figure 1, element 34) for receiving optical radiation into said housing (see para. 30);
an interface connector (see figure 1, element 11) affixed to said housing for engaging digital interface cards (see para. 30);
at least one digital interface card (see figure 1, element 10) having an image sensor positioned on said card such that it is aligned to receive optical radiation from said lens when said card is engaged with said connector (see para. 30); and

it is implied the Wess reference has a processor or controller affixed within said housing and being offboard said digital interface card, said processor in electrical communication with said connector for receiving and processing image data communicated through said connector from said image sensor, in order to process the image that is displayed on the display 48 as well as receive parameters to control the camera and card (see para 32 and 35).

The Wess reference does not disclose wherein the processor or controller is a microprocessor. The Wess reference teaches the memory cards may be used in digital cameras (see para 43).

Juen, US 6,727,943, discloses a digital camera with a microprocessor (MPU 12) that controls the entire camera and connects to a recording circuit 14 that records images in a CF card 15 (see column 4, lines 45-53).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Wess et al., US 2004/0201745, in view of Juen, US 6,727,943, to have a microprocessor affixed within said housing and being offboard said digital interface card, said microprocessor being in electrical communication with said connector for receiving and processing image data communicated through said connector from said image sensor, in order to save the images on the memory card, allowing the pictures to be transferred to other devices for later viewing or further processing, thus adding more versatility to the camera.

In regard to claims 2 and 22, Wess et al., US 2004/0201745, in view of Juen, US 6,727,943, discloses the digital imaging system of claims 1 and 21, respectively. The

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Wess reference discloses wherein said at least one digital interface card further comprises an on board memory (see figure 1, element 12) for storing the sensor specification data to be read by said microprocessor to enable proper imaging processing operations (see para 35: the memory stores the resolution, size, and aspect ratio of the image sensor).

In regard to claims 3 and 23, Wess et al., US 2004/0201745, in view of Juen, US 6,727,943, discloses the digital imaging system of claims 1 and 21, respectively. The Wess reference discloses wherein said image sensor is a charge-coupled device sensor (see para 29: CCD image sensor may be employed on the card).

In regard to claims 4 and 24, Wess et al., US 2004/0201745, in view of Juen, US 6,727,943, discloses the digital imaging system of claims 1 and 21, respectively. The Wess reference discloses wherein said image sensor is a semiconductor sensor (see para 29: CMOS image sensor may be employed on the card).

In regard to claims 5 and 25, Wess et al., US 2004/0201745, in view of Juen, US 6,727,943, discloses the digital imaging system of claims 1 and 21. It is implied the Wess reference discloses wherein said digital interface card further comprises at least one analog to digital converter, in order for the card to save the data in the flash memory and transfer the images to external devices such as computer 40 (see para 32).

In regard to claims 6 and 26, Wess et al., US 2004/0201745, in view of Juen, US 6,727,943, discloses the digital imaging system of claims 1 and 21, respectively. The Wess reference discloses further comprising a power supply (see figure 2, element 56) for transmitting power to said microprocessor and said interface connector (see para. 34).

In regard to claims 7 and 27, Wess et al., US 2004/0201745, in view of Juen, US 6,727,943, discloses the digital imaging system of claims 6 and 26, respectively. The Wess reference discloses wherein said digital interface card further comprises a power supply circuit for transmitting power from said connector interface to on board components of said digital interface card (see para. 39).

In regard to claim 8, Wess et al., US 2004/0201745, discloses a digital imaging system comprising:

- a housing (see figure 1, element 16) having a lens (see figure 1, element 34) for receiving optical radiation into said housing (see para. 30);

- an interface connector (see figure 1, element 11) affixed to said housing for engaging digital interface cards (see para. 30);

- at least one digital interface card (see figure 1, element 10) comprising:

- an image sensor (see figure 1, element 14) positioned on said card such that it is aligned to receive optical radiation from said lens when said card is engaged with said connector (see para. 30); and an on board memory (see figure 1, element 12) for storing the sensor specification data (see para. 30);

- it is implied the Wess reference has a processor or controller affixed within said housing and being offboard said digital interface card, said processor in electrical communication with said connector for receiving and processing image data communicated through said connector from said image sensor, in order to process the image that is displayed on the display 48 as well as receive parameters to control the camera and card (see para 32 and 35).

The Wess reference does not disclose wherein the processor or controller is a microprocessor. The Wess reference teaches the memory cards may be used in digital cameras (see para 43).

Juen, US 6,727,943, discloses a digital camera with a microprocessor (MPU 12) that controls the entire camera and connects to a recording circuit 14 that records images in a CF card 15 (see column 4, lines 45-53).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Wess et al., US 2004/0201745, in view of Juen, US 6,727,943, to have a microprocessor affixed within said housing and being offboard said digital interface card, said microprocessor being in electrical communication with said connector for receiving and processing image data communicated through said connector from said image sensor, in order to save the images on the memory card, allowing the pictures to be transferred to other devices for later viewing or further processing, thus adding more versatility to the camera.

In regard to claim 9 Wess et al., US 2004/0201745, in view of Juen, US 6,727,943, discloses the digital imaging system of claim 8. The Wess reference discloses wherein said image sensor is a charge-coupled device sensor (see para 29: CCD image sensor may be employed on the card).

In regard to claim 10 Wess et al., US 2004/0201745, in view of Juen, US 6,727,943, discloses the digital imaging system of claim 8. The Wess reference discloses wherein said image sensor is a semiconductor sensor (see para 29: CMOS image sensor may be employed on the card).

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In regard to claim 11 Wess et al., US 2004/0201745, in view of Juen, US 6,727,943, discloses the digital imaging system of claim 8. It is implied the Wess reference discloses wherein said digital interface card further comprises at least one analog to digital converter, in order for the card to save the data in the flash memory and transfer the images to external devices such as computer 40 (see para 32).

In regard to claim 12 Wess et al., US 2004/0201745, in view of Juen, US 6,727,943, discloses the digital imaging system of claim 8. The Wess reference discloses further comprising a power supply (see figure 2, element 56) for transmitting power to said microprocessor and said interface connector (see para. 34).

In regard to claim 13 Wess et al., US 2004/0201745, in view of Juen, US 6,727,943, discloses the digital imaging system of claim 8. The Wess reference discloses wherein said digital interface card further comprises a power supply circuit for transmitting power from said connector interface to on board components of said digital interface card (see para. 39).

In regard to claim 14, Wess et al., US 2004/0201745, discloses a digital camera system comprising:

- a camera body (see figure 1, element 16) having a lens (see figure 1, element 34) for receiving light into said camera body (see para. 30);

- an interface connector (see figure 1, element 11) affixed to said housing for engaging digital interface cards (see para. 30);

at least one digital interface card (see figure 1, element 10) having an image sensor positioned on said card such that it is aligned to light from said lens when said card is engaged with said connector (see para. 30); and

it is implied the Wess reference has a processor or controller affixed within said housing and being offboard said digital interface card, said processor in electrical communication with said connector for receiving and processing image data communicated through said connector from said image sensor, in order to process the image that is displayed on the display 48 as well as receive parameters to control the camera and card (see para 32 and 35).

The Wess reference does not disclose wherein the processor or controller is a microprocessor. The Wess reference teaches the memory cards may be used in digital cameras (see para 43).

Juen, US 6,727,943, discloses a digital camera with a microprocessor (MPU 12) that controls the entire camera and connects to a recording circuit 14 that records images in a CF card 15 (see column 4, lines 45-53).

It would have been obvious to one of ordinary skill in the art at the time of invention to have been motivated to modify Wess et al., US 2004/0201745, in view of Juen, US 6,727,943, to have a microprocessor affixed within said housing and being offboard said digital interface card, said microprocessor being in electrical communication with said connector for receiving and processing image data communicated through said connector from said image sensor, in order to save the

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images on the memory card, allowing the pictures to be transferred to other devices for later viewing or further processing, thus adding more versatility to the camera.

In regard to claim 15, Wess et al., US 2004/0201745, in view of Juen, US 6,727,943, discloses the digital camera system of claim 14. The Wess reference discloses wherein said at least one digital interface card further comprises an on board memory (see figure 1, element 12) for storing the sensor specification data to be read by said microprocessor to enable proper imaging processing operations (see para 35: the memory stores the resolution, size, and aspect ratio of the image sensor).

In regard to claim 16, Wess et al., US 2004/0201745, in view of Juen, US 6,727,943, discloses the digital camera system of claim 14. The Wess reference discloses wherein said image sensor is a charge-coupled device sensor (see para 29: CCD image sensor may be employed on the card).

In regard to claim 17, Wess et al., US 2004/0201745, in view of Juen, US 6,727,943, discloses the digital camera system of claim 14. The Wess reference discloses wherein said image sensor is a semiconductor sensor (see para 29: CMOS image sensor may be employed on the card).

In regard to claim 18, Wess et al., US 2004/0201745, in view of Juen, US 6,727,943, discloses the digital camera system of claim 14. It is implied the Wess reference discloses wherein said digital interface card further comprises at least one analog to digital converter, in order for the card to save the data in the flash memory and transfer the images to external devices such as computer 40 (see para 32).

In regard to claim 19, Wess et al., US 2004/0201745, in view of Juen, US 6,727,943, discloses the digital camera system of claim 14. The Wess reference discloses further comprising a power supply (see figure 2, element 56) for transmitting power to said microprocessor and said interface connector (see para. 34).

In regard to claim 20, Wess et al., US 2004/0201745, in view of Juen, US 6,727,943, discloses the digital camera system of claim 19. The Wess reference discloses wherein said digital interface card further comprises a power supply circuit for transmitting power from said connector interface to on board components of said digital interface card (see para. 39).

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gevell Selby whose telephone number is 571-272-7369. The examiner can normally be reached on 8:00 A.M. - 5:30 PM (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on 571-272-7372. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

gvs



LIN YE
SPE. ART UNIT 2622